

## ABSTRACT OF THE DISCLOSURE

An improved device for equilibrium dialysis procedures utilizing a dialysis membrane inserted in a gap in and separating all of any number of test wells contained in the dialysis block

5 into at least a donating and receiving side which can be accessed and manipulated at any time  
is described  
during testing from the top of the device. The device may be constructed from a series of nine  
blocks of virgin teflon, cut and made flat to achieve certain dimensions ideal for making the  
device compatible with standard 96-well format laboratory equipment and conducive to robotic  
automation. The bars are placed side-by-side and connected by a pair of alignment pins along  
10 which the bars can slide on a horizontal plane relative to one another, individually or  
collectively, to aid in assembly, usage and cleaning. The bars are further held together during  
usage by a clamping mechanism to prevent any leakage of the sample being tested. Such wells  
are formed in an 8x12 array such that a diameter of each of the wells of a particular row  
corresponds to and overlaps with the separation gap between successive rows of the bars. The  
15 dialysis membranes are inserted into the gaps during assembly of the device, with one membrane  
inserted between each of the eight gaps formed between the nine rows of bars. The advantages  
of an equilibrium dialysis apparatus constructed in this manner include decreased cost, increased  
efficiency and ease in testing, and increased flexibility in testing methods.